

# APS

## Advanced Power Solutions

### UNIVERSAL AC INPUT HARMONIC CORRECTION AC-DC SINGLE OUTPUT 100 WATTS INDUSTRIAL DIN RAIL SWITCHING POWER SUPPLIES APS100PD SERIES



#### FEATURES:

- ACCOMMODATES UNIVERSAL AC INPUT
- MEETS IEC1000-3-2 HARMONIC CORRECTION
- MEETS UNIVERSAL SAFETY STANDARDS AND INDUSTRIAL UL508
- INDUSTRIAL POWER SUPPLIES FOR SNAP-ON MOUNTING ON DIN-RAILS
- EMI MEETS EN 55022 CLASS B
- CE MARKING COMPLIANCE

#### SPECIFICATION

##### INPUT SPECIFICATION

**Input Voltage:** Typ. 90-264Vac universal AC input  
**Input Connector:** Phoenix GMSTBA2.5/3-G-7.62  
**Input Frequency:** 47-63 Hz  
**Inrush Current:** Typ. 25A @230Vac  
**Input Current:** 1.1A @115Vac/ 0.55A @230Vac  
**Dielectric Withstand:** Meets IEC950  
**EMI:** Meet EN55022/FCC Class B  
**Power Factor Correction:** Meets Harmonic Correction per IEC1000-3-2. PF typ. 0.96-0.98  
**No Load Operation:** No damage  
**Hold-up Time:** Typ. 46mS @115Vac & 230Vac  
**Earth Leakage:** Less than 0.70mA @ 230Vac

##### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart  
**Output Current:** See Ratings Chart  
**Output Wattage:** Typ. 100W continuous  
**Output Connector:** Phoenix MSTBA2.5/4-G-5.08  
**Line Regulation:** Typ. 0.1%  
**Load Regulation:** Typ.  $\pm 1.0$ -1.5% typical  
**Noise & Ripple:** Typ. 1.0% peak to peak  
**OVP:** Option for Built-in  
**Remote Sense:** Option  
**Adjustment:** Available  
**Overload Protection (OLP):** Fully protected against output overload and short circuit  
 Consult the factory for OLP setting  
**LED Indicator:** Installed

##### GENERAL SPECIFICATION

**Efficiency:** Typ. 82%  
**Switching Frequency:** Fixed freq. 66.6KHz  
**Circuit Topology:** Fixed frequency forward circuit  
**Transient Response:** Output voltage returns in less than 3mS following a 25% load change  
**Safety Standard:** IEC950/UL1950 Class I  
**Power Density:** 2.76 Watt / Cubic inch  
**Industrial Grade UL 508**

**Operating Temperature:** -10 to +70°C at full load  
 (> +60°C: by de-rating 2% / °C)  
**Storage Temperature:** -25 to +85°C  
**Temperature Coefficient:** 0.03% / °C  
**Cooling:** Free air convection cooling for Temp. < +60°C  
 Moving air is request for Temp. > +60°C full load operation  
**Construction format:** Enclosure metal box format with DIN-clips

Note: (1) All measurements are at nominal input, full load, and +25°C unless otherwise specified.

(2) Load regulation is measured at 115Vac or 230Vac in percentage to indicate the change in output voltage as the load is varied from half load to full load (unit  $\pm\%$ ).

## OUTPUT VOLTAGE/CURRENT RATINGS CHART

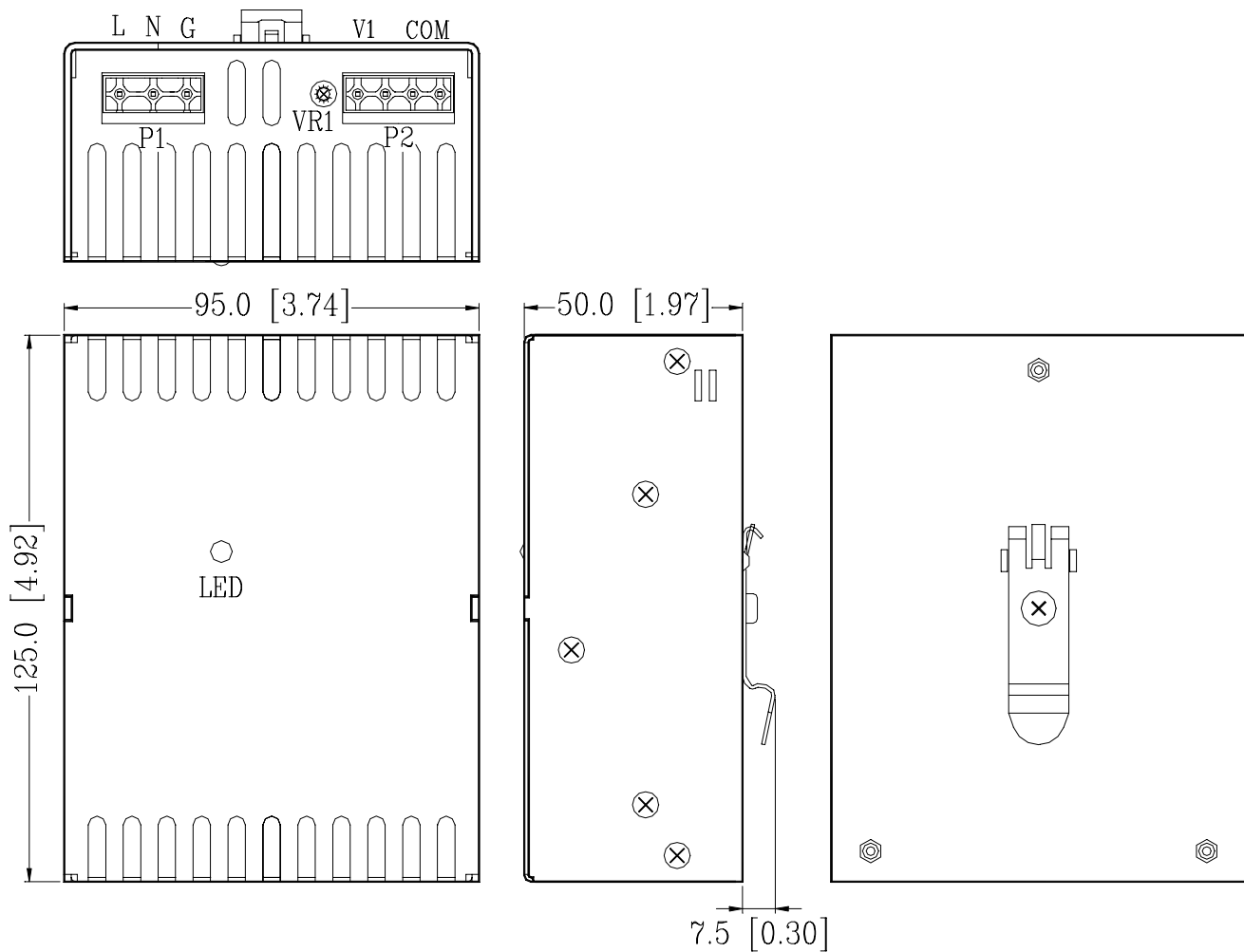
### SINGLE OUTPUT

MODEL NO.	MAIN O/P @ (•)(#)	
	Typ.	Volt.
APS100PD-S120083	8.3A	12.0V
APS100PD-S240042	4.2A	24.0V
APS100PD-S480022	2.2A	48.0V

Symbol: "@" Adjustable. "(•)" OVP for option.  
 "(#)" Remote sensing for option.

### MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 0.67kg (23.5 Oz.)



### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENTS

ASSIGNMENT CONNECTOR & PIN#	AC INPUT			SINGLE OUTPUT	
	AC-L	AC-N	AC-G	VO1	DC-COM
	P1-3.	P1-2.	P1-1.	P2-3, 4.	P2-1, 2.

Mating connector: P1: Phoenix GMSTB2.5/3-ST-7.62

P2: Phoenix MSTB2.5/4-ST-5.08